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Differential expression of the *jun* family members in rat brain	**1959**	Britt Mellström, Matilde Achaval, Dolores Montero, José R. Naranjo & Paolo Sassone-Corsi
Changes in phosphorylation of *myc* oncogene and *RB* antioncogene protein products during growth arrest of the murine lymphoma WEHI 231 cell line	**1965**	Shyamala Maheswaran, James E. McCormack & Gail E. Sonenshein
Transformation of mouse skin endothelial cells *in vivo* by direct application of plasmid DNA encoding the human T24 H-*ras* oncogene	**1973**	Philip A. Burns, Andrew Jack, Fiona Neilson, Sheena Haddow & Allan Balmain
Effects of IL-3 on promoter usage, attenuation and antisense transcription of the c-*myc* oncogene in the IL-3-dependent Ba/F3 early pre-B cell line	**1979**	Yung Chang, Douglas B. Spicer & Gail E. Sonenshein
Effect of herbimycin A on growth and pp60$^{c\text{-}src}$ activity in human colon tumor cell lines	**1983**	R. Garcia, N.U. Parikh, H. Saya & G.E. Gallick
Expression of activated rat *neu* oncogene is sufficient to induce experimental metastasis in 3T3 cells	**1991**	Dihua Yu & Mien-Chie Hung
Expression of the Met/HGF receptor in normal and neoplastic human tissues	**1997**	M.F. Di Renzo, R.P. Narsimhan, M. Olivero, S. Bretti, S. Giordano, E. Medico, P. Gaglia, P. Zara & P.M. Comoglio
Human malignant mesothelioma cell lines express PDGF β-receptors whereas cultured normal mesothelial cells express predominantly PDGF α-receptors	**2005**	M.A. Versnel, L. Claesson-Welsh, A. Hammacher, M.J. Bouts, Th.H. van der Kwast, A. Eriksson, R. Willemsen, S.M. Weima, H.C. Hoogsteden, A. Hagemeijer & C.-H. Heldin
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